AM-FM STEREO TUNER

KT-880D

INSTRUCTION MANUAL

KENWOOD

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Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.
We appreciate your patronage and take pride in the long tradition of quality components.
So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features, and system-connection considerations, so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability, we have sought to anticipate your needs and desires.
Keep this manual handy for future reference.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.
Model Serial Number_____

Unpacking

Unpack the unit carefully and make sure that all accessories and cables are put aside so they will not be lost.
Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Rear panel safety precautions

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Before applying power

Important!

U.S.A., Canada, and Australia
These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows, should be disregarded.

All other countries
Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC voltage selector

- This unit operates on 120 V or 220-240 V AC. The AC voltage selector is preset at the factory for the area to which the unit is to be shipped. However, to avoid damage due to an incorrect setting because of local variations or shipping errors, make the following checks.

Note:
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

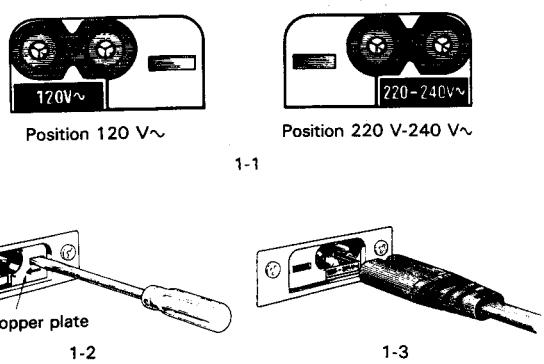


Fig. 1

1. Before plugging in this unit, make sure that the position of the AC voltage selector conforms to your line (mains) voltage. If not, it must be reset. See Fig. 1-1.
2. To reset the selector, slide the stopper plate to the opposite side with a screwdriver or other pointed tool. See Fig. 1-2.
3. Insert the power cord securely. See Fig. 1-3.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Before operation

Notes on installation

1. Do not place the unit in a place which is exposed to direct sunlight, near a heating appliance, etc.
2. Do not place a vase containing water, makeup, etc. on the unit. Do not use in a humid place.
3. To maintain good ventilation, place the unit at least 10 cm away from the walls.
4. Choose a location that is relatively free from vibration or excessive dust.
5. Keep the unit away from a source of magnetic fields such as TV sets, motorized toys, etc.

Safety precautions

Never remove the case. If the internal parts are touched accidentally, a serious electric shock might occur.

Touching the power plug when your hands are wet may result in a serious electric shock.

Never pull, bend or extend the power cord. This could damage the power cord, resulting in a broken cord or short-circuit.

In case of abnormal smell

If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest Service Station.

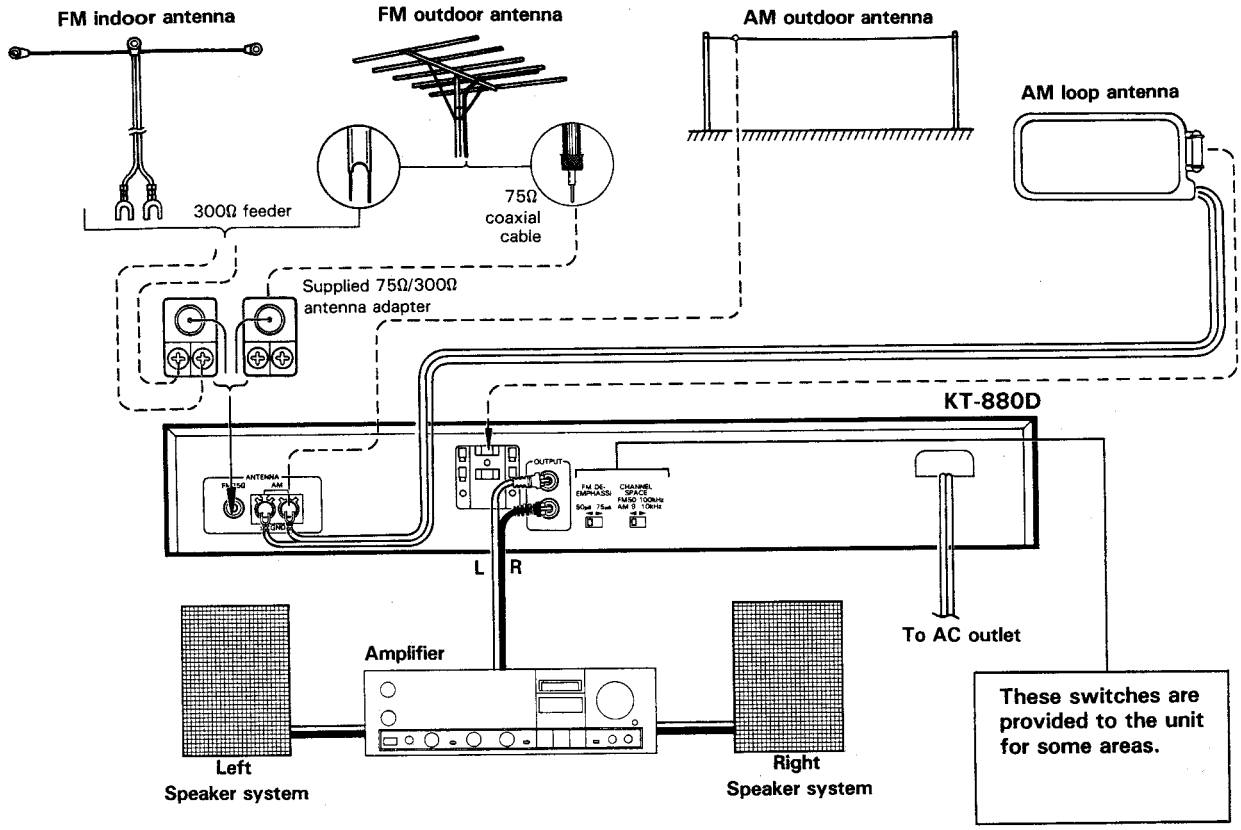
Cleaning

Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet. Use a silicone cloth or a clean dry cloth.

Safety precaution for AC plug (For U.S.A. and Canada)

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

System connections



System connections diagram

Output

Signals from the OUTPUT jacks are fed to the amplifier. Connection cables should be plugged to the amplifier TUNER jacks. Shielded cables terminated at both ends with standard phono plugs are supplied with this tuner.

Power cord

A low power is supplied to the memory to retain the memory contents when the POWER switch is set to OFF. Even when the power cord is disconnected from the AC outlet, the memory is backed up. The memory contents are retained for about three days.

To connect the power cord to the amplifier AC outlet, use the unswitched outlet.

Ground

For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable.

A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

FM indoor antenna

Connect the T-shaped indoor antenna (aupplied) to the 75Ω FM ANTENNA terminals as shown in **System connections diagram**. Spread the two arms that form the top of the "T" horizontally and hold them against convenient wall surfaces. Try several locations for best results on your favorite stations. Tape the antenna in place where the best compromise is found between listening results and appearance.

FM outdoor antenna

Consult with your dealer or service man about the best method of selecting and erecting an outdoor FM antenna. The choice of lead-in (feeder) wire is also important. The flat ribbon-shaped twin lead performs well electrically, is cheaper and is somewhat easier to handle in routing through windows and around rooms. Coaxial cable is more expensive, does a much better job of minimizing interference, is less prone to the effects of weather and close-by metal objects, and is nearly as good a signal conductor as the ribbon type wire. The latter is particularly true of foam-type coaxial cables. Coaxial cable is somewhat more difficult to install at the point where the cable enters the building. If coaxial cable is selected, make sure the antenna is designed to drive that type of cable. In many cases a matching transformer (balun) must be used to connect the antenna terminals to the coaxial cable.

75Ω coaxial cable connection

After stripping the end of your coaxial cable, mount the supplied 75Ω/300Ω FM antenna adapter on the cable as shown. Then insert the plug into the 75Ω ANTENNA terminal on the rear panel as whown in **System connections diagram**.

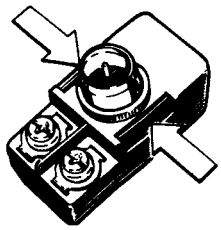
300Ω ribbon type cable connection

Although the unit is designed excusively for use with 75Ω coaxial cable, it can also accept a 300Ω indoor antenna or 300Ω ribbon-type lead-in cable by using the supplied 75Ω/300Ω Antenna Adapter. Strip the plastic insulation from the wire ends for about 10 mm (3/8 inch). Connect the wires to the terminals on the adapter, then insert it into the 75Ω ANTENNA terminal on the rear panel (see **System connections diagram**).

To connect the 300Ω feeder, attach the ring shown in Figure. If the ring is not attached, the sensitivity decreases.

Note:

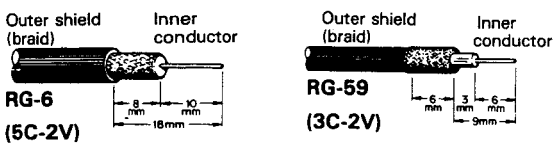
An FM outdoor antenna can be connected to the tuner with either a 75Ω coaxial cable or 300Ω ribbon feeder. For proper connection, carefully read the instruction manual for the FM outdoor antenna.



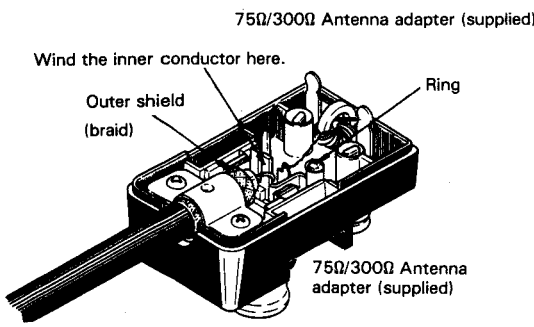
Press the claws in the direction of the arrows with the fingers to release the lock and pull out the cover.

How to open the 75Ω/300Ω antenna adapter

1. Arrange the coaxial cable as illustrated.



2. Connect the processed coaxial cable to 75Ω/300Ω antenna adapter as shown below. In the case of RG-6(5C-2V), insert and wind the inner conductor around the slit. In the case of RG-59 (3C-2V), further insert and wind the inner conductor around the slit. Attach the ring, shown in the below figure, to the boss in the cover.



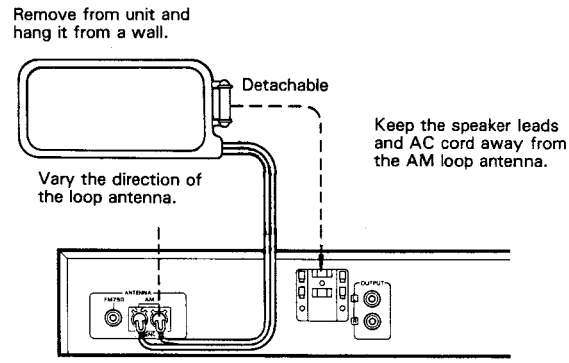
75Ω/300Ω antenna connection

AM loop antenna

Tune to your favorite AM station and position the Loop antenna for best reception. Try other stations and find the position that gives best overall reception.

Peel off the covering seal from the AM loop antenna bracket and fix the bracket to the best reception position.

When this unit is mounted in a rack or placed on a shelf with insufficient space behind, remove the loop antenna and hang if from a wall in the direction which gives best reception as shown below. If the length of the lead wire is too short, add a lead wire of an appropriate length.


Remove from unit and hang it from a wall.
Detachable
Keep the speaker leads and AC cord away from the AM loop antenna.
Vary the direction of the loop antenna.

AM loop antenna setting

AM outdoor antenna

In steel buildings or at a great distance from the transmitter, it may be necessary to install an outside longwire antenna. The end of this wire should be stripped of insulation and connected to the AM terminal. At this time, keep the loop antenna connected.

FM DE-EMPHASIS switch (Except some areas)

This switch has been set to the correct position for a given market area. However, check to see that this switch is set correctly before operating your unit. An incorrect setting will adversely affect high-frequency performance.

Europe and Oceania ..... 50 μs
Other countries ..... 75 μs

AM/FM CHANNEL SPACE switch (Except some areas)

The CHANNEL SPACE switch on the rear panel is set to the correct setting that prevails in the area to which the unit is shipped. However, if the channel space setting is not matched to the area where the unit is to be used; for instance, when you moved from area 1 to area 2 or vice versa, desired reception of AM/FM broadcasts is not expected. In this case, change the CHANNEL SPACE setting in accordance with the area corresponding to the table shown below.

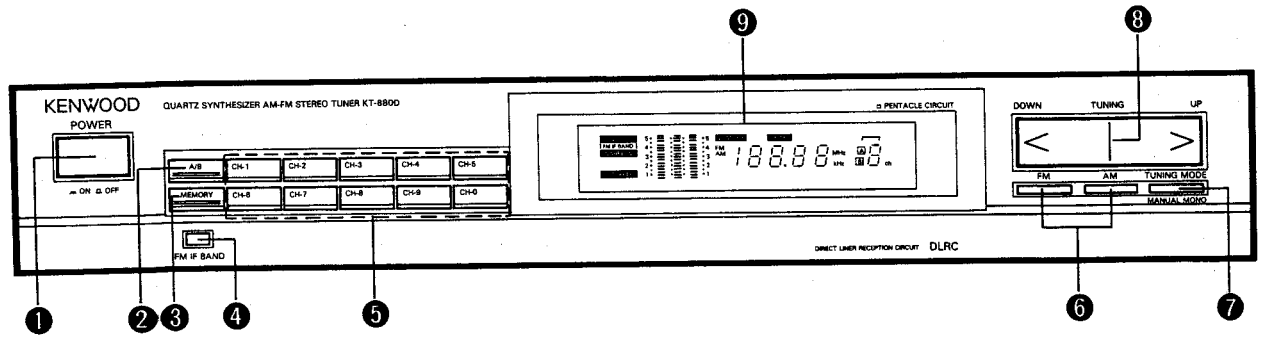
Area	Channel Space Frq.	
1. U.S.A., Canada Hawaii, and Guam	**FM:**	100 kHz
	AM:	10 kHz
2. European countries Far East countries	**FM:**	50 kHz
	AM:	9 kHz

Channel space table

Note:

When changing the setting of the AM/FM CHANNEL SPACE switch, turn the POWER switch OFF and ON.

Controls and indicators



❶ POWER switch
Press this switch to supply power. Press the switch again to turn the power off.

❷ PRESET FUNCTION switch (A/B)/Indicator
Use this switch to switch preset stations between the A side and B side. The corresponding indicator lights.

❸ MEMORY switch
When this switch is pressed, the MEMORY indicator lights and the unit stands by for preset station memory.

❹ FM IF BAND switch
This switch operates only during FM reception, and switches the intermediate frequency passing band between "WIDE" and "NARROW". When listening in an area where there is no radio interference, press the switch so that the "FM IF BAND" indicator lights to indicate the WIDE mode: High-quality sound without distortion can be recording.
When interference is noticed, set the switch off for the NARROW mode: The radio wave selectivity is inproved, thereby resulting interference free reception.

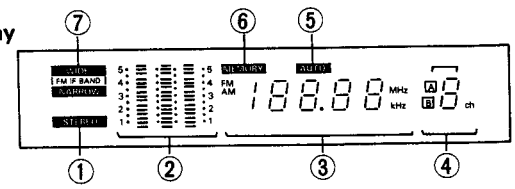
❺ Preset station switches (CH-1 to CH-0)
One FM or AM station can be stored in each of the A side and B side of each CH switch. When the switch is pressed, the preset station indicator lights and the frequency counter displays the frequency that has been preset in the switch. A total of 20 stations, 10 in the A side and 10 in the B side, can be preset.

❻ FM/AM selector switch
FM: Press this switch for FM reception.
AM: Press this switch for AM reception.

❼ TUNING MODE switch
Each time this switch is pressed, the AUTO TUNING indicator lights and goes off.
AUTO TUNING indicator ON: For auto tuning
AUTO TUNING indicator OFF: For manual tuning
During manual tuning, the listening mode is switched automatically from STEREO to MONO.

❽ TUNING key
AM and FM stations are tuned in by pressing this switch.
To tune in the AUTO mode, lightly press the > section of the switch to increase the frequencies, and press the < section to decrease the frequencies.
To tune in the MANUAL mode, hold the switch depressed while observing the tuning signal indicators, until the desired station is received.
In the AUTO mode, the scanning stops at the top or bottom end.
In the MANUAL mode, the scanning moves to the opposite side at the end.

❾ Display



① STEREO indicator
Lights when an FM stereo broadcast is received.

② Tuning signal indicators
These indicators consist of the signal meter (in the vertical direction) and tuning meter (in the horizontal direction), providing visual display of both signal and tuning conditions. When approaching the tuning point, the left or right side of the tuning meter lights red. The number of lighting LED points increases as the station is further tuned. When the station is tuned in, the white LED points of the vertical signal meter on the center light, with the number of LED points corresponding to the signal strength. When the station is detuned, these meters operate in the reverse order, until all the red LED points go off.

Note:
1. In AM reception, the center white indicator lights when a station is tuned in.
2. If the signal strength of the electric field is insufficient, the left and right indicators will not light more than 4 LED points, or the indication becomes asymmetrical.

③ Frequency display
This display shows the received FM or AM frequency digitally. In MANUAL TUNING mode, press the TUNING key while observing this display.

④ Preset FUNCTION/MEMORY switch display
Displays the A/B memory channel 1 – 0 selected with PRESET FUNCTION switch.

⑤ AUTO TUNING indicator
Lights when the TUNING MODE switch is set to AUTO.

⑥ MEMORY indicator
Lights for about 5 seconds when the MEMORY switch is pressed. Press a preset station switch while the MEMORY indicator is lit to preset the required broadcasting frequency.

⑦ FM IF band indicator
WIDE: Lights when the FM IF BAND knob is set to the WIDE position.
NARROW: Lights when the FM IF BAND knob is set to the NARROW position.

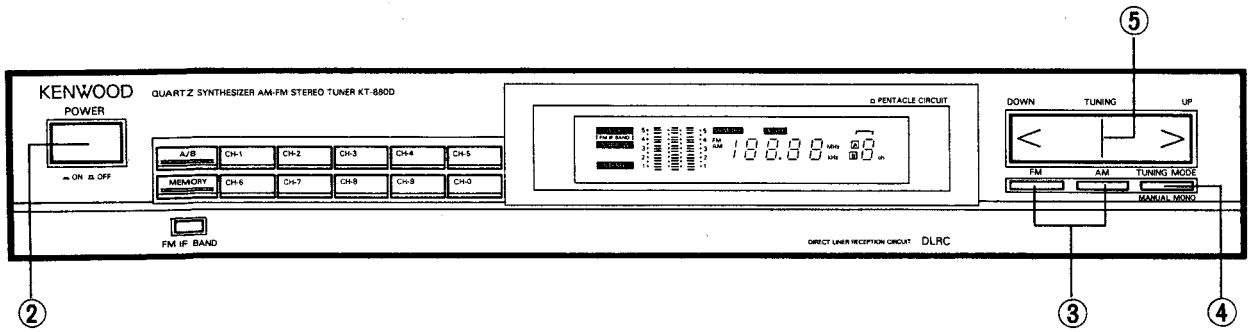
Note:
During AM reception, only the WIDE indicator is activated.

Operating instructions

■ Auto tuning reception

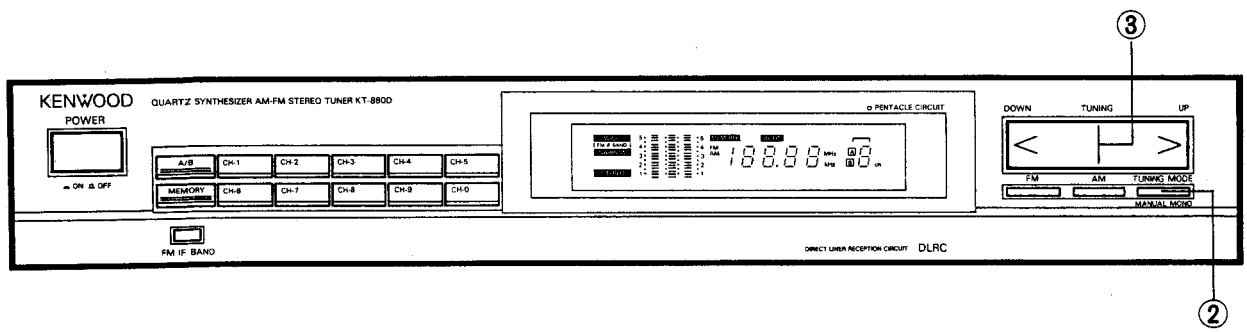
① Set the input selector of the amplifier to TUNER.
② Press the POWER switch.
The FREQUENCY DISPLAY lights and the frequency of the last station * is displayed.
③ To listen to AM stations, press the AM SELECTOR switch.
The frequency display shows the last AM station.
To listen to FM stations, press the FM SELECTOR switch.
The frequency display shows the last FM station.
④ Set the TUNING MODE switch so that the AUTO indicator lights.
⑤ To tune in the higher-frequency station, lightly press the > side of the TUNING key. To tune in a lower-frequency station, press the < side. The frequencies are automatically scanned, until a broadcasting station is detected. When a station is tuned in, the signal indicator lights.
⑥ Adjust the volume and tone of your amplifier.

***Last station**
As the memory of this unit is backed up, the frequency received before the power is turned off is memorized. This is referred to as the last station frequency. When the power is turned on again, the unit tunes in the last station frequency.



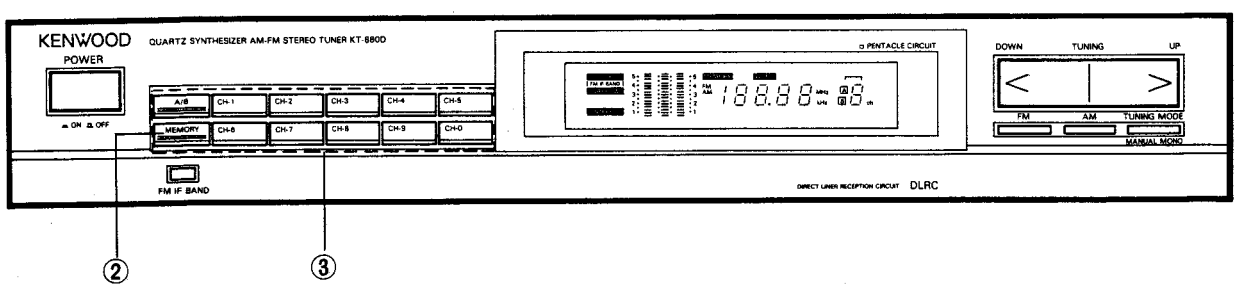
■ Manual tuning

Use manual tuning mode to receive a weak signal station.
① Perform procedures 1, 2 and 3 above.
② Set the TUNING MODE switch so that the "AUTO" indicator does not light (Manual mode).
③ Set the TUNING key to tune in the desired station. The frequencies vary continuously while the key is held depressed.
④ Adjust the volume and tone of your amplifier.



■ Preset tuning

① Receive a station.
② Press the MEMORY switch. The MEMORY indicator lights for about 5 seconds.
③ While the MEMORY indicator lits, press one of the preset station switches.
The MEMORY indicator goes off and the station being received is stored in the pressed preset station switch.
Perform the same procedures on other preset station switch.
To receive the preset station, press the corresponding preset station switch.



In case of difficulty

If your tuner should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

General	Possible cause	Correction
The station stored in the PRESET STATION button is erased.	The memrory is not backed up due to poor power cord connection. Connect the power cord securely to the AC outlet.	Firmly connect the AC cord to the AC outlet on the wall or the unswitched outlet on the amplifier.
Occurs during AM reception only	**Possible cause**	**Correction**
Intermittent buzz or cracking sound.	Lightning. Fluorescent lamps starting. Appliance of furnace starting.	No remedy. Try reversing AC plug. Try reversing AC plug.
Occurs during FM reception only	**Possible cause**	**Correction**
Hiss that gets worse in stereo reception.	Very weak antenna input signal	Consider an outdoor antenna installation. In areas remote from the transmitter a 5 to 8 element antenna designed exclusively for FM is suggested.
Rhythmic static or popping noises.	Automobile ignition noise, especially evident when receiving weak signals.	Review antenna installation. Site the antenna as far from the street as possible and use coaxial cable.

Specifications

[FM tuner section]
Antenna impedance ..... 75 ohms unbalanced
FM frequency range ..... 87.5 MHz to 108 MHz
Usable sensitivity ..... 10.8 dBf (0.95 μV)
50 dB quieting sensitivity
Mono ..... 16.2 dBf (1.8 μV)
Stereo ..... 38.8 dBf (24.0 μV)
Signal to noise ratio
Mono ..... 88 dB at 65 dBf,
88 dB at 85 dBf
Stereo ..... 76 dB at 65 dBf,
82 dB at 85 dBf
Total harmonic distortion
Mono:1 kHz 0.04%
50 Hz ~ 10 kHz 0.1%
Stereo:1 kHz 0.06%
50 Hz ~ 10 kHz 0.12%
Capture ratio
WIDE ..... 1 dB
NARROW ..... 2.5 dB
Alternate channel selectivity
WIDE ..... 60 dB
NARROW ..... 90 dB
Stereo separation
1 kHz ..... 55 dB
50 Hz ~ 10 kHz ..... 40 dB
Frequency response ..... 20 Hz to 15 kHz
±0.5 dB
Spurious rejection ratio ..... 105 dB
Image rejection ratio ..... 82 dB
IF rejection ratio ..... 110 dB
AM suppression ratio ..... 76 dB
Subcarrier suppression ratio ..... 70 dB
Output level/impedance at 1 kHz, 100% dev.
Fixed ..... 0.6 V/3.3 kohms

[AM tuner section]
Frequency range ..... 530 kHz ~ 1610 kHz
(10 kHz Step) or
531 kHz ~ 1602 kHz
(9 kHz Step)
Usable sensitivity ..... 10 μV (350 μV/m)
Signal to noise ratio ..... 52 dB
Total harmonic distortion 0.3%
Image rejection ..... 40 dB
Selectivity ..... 25 dB
Output level/impedance ..... 0.18 V, 3.3 kohms
(400 Hz, 30% Mod.)

[General]
Power consumption ..... 13 W
Dimensions ..... W:440 mm (17-5/16″)
H: 78 mm (3-1/16″)
D: 317 mm (12-1/4″)
Weight (Net) ..... 3.5 kg (7.7 lb)

Note:
We follow a policy of continuous advancements in development. For this reason specifications may be changed without notice.